IN THE CLAIMS:

1. (Original) A layer 2 switch, comprising:

a plurality of ports, at least one port of said plurality of ports capable of being set to a status of uplinkguard enabled (UG status);

first circuits for running the spanning tree protocol (STP) in said layer 2 switch, said STP capable of selecting said at least one port as either a designated port or as a root port;

second circuits for running uplinkguard enabled process, and said uplinkguard enabled process determining whether or not a port set to UG status has been selected by STP as a designated port; and,

blocking circuits to set said at least one port into blocked state, said blocking circuits setting said at least one port into blocked state in response to said at least one port being both in uplinkguard enabled status and selected by STP as a designated port.

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2. (Original) A layer 2 switch, comprising:

a plurality of ports, at least one port of said plurality of ports capable of being set to a status of Uplinkguard enabled (UG status);

first circuits for maintaining said at least one port in blocked status, and for transitioning said port into forwarding status;

6   second circuits for running Uplinkguard enabled process, and said Uplinkguard

7   enabled process determining whether or not a port set to UG status has been transitioned

8   to forwarding status; and,

9   blocking circuits to set said at least one port into blocked state, said blocking cir-

10   cuits setting said at least one port into blocked state in response to said at least one port

11   being both in UG enabled status and transitioned into forwarding status, and said at least

12   one port not being a root port when in forwarding status.

1   5. (Original) A method of managing a switch for use in a computer network, comprising:

2   providing a plurality of ports, at least one port of said plurality of ports capable of

3   being set to a status of uplinkguard enabled status (UG status);

4   setting said at least one port to UG status;

5   running a spanning tree protocol (STP) in said switch, said STP capable of se-

6   lecting said at least one port as either a designated port or as a root port;

7   running uplinkguard enabled process, and said uplinkguard process determining

8   whether or not a port set to UG status has been selected by STP as a designated port; and,

9   setting said at least one port into blocked status, in response to said at least one

10   port being both in uplinkguard enabled status and selected by STP as a designated port.

1   10. (Original) A method of managing a switch for use in a computer network, compris-

2   ing:

3   providing a plurality of ports, at least one port of said plurality of ports capable of

4   being set to a status of uplinkguard enabled (UG status);

5   setting said at least one port to UG status, said at least one port being in blocking status;

6   transitioning said at least one port from blocking status to forwarding status;

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7   determining whether or not said at least one port set to UG status has been transi-

8   tioned to forwarding status, and if said at least one port is not a root port; and

9   setting said at least one port into blocked state in response to said at least one port

10   being both in UG status and transitioned into forwarding status, and said at least one port

11   not being a root port.

1   5. (Original) A data structure stored in a memory of a computer network switch, said

2   data structure having entries, said entries having a "state" field and a "role" field, said

3   state field having the value of "blocked" or the value of "forwarding", comprising:

4   a first entry having the role field set to "root port" and the state field set to for-

5   warding;

6   a second entry having the role field set to "designated port" and the state field set

7   to forwarding;

8   a third entry having the role field set to "blocked port" and the state field set to

9   blocked; and,

10   a fourth entry having the role field set to "uplinkguard enabled" and the state field

11   set to blocked.

1   6. (Original) A computer readable memory device, comprising: said computer readable

2   memory device containing instructions for practice of the method of claim 4 or claim 5.

1   7. (Original) Electromagnetic signals propagated over a computer network, comprising:

2   said electromagnetic signals having instructions for practice of the method of claim 4 or

3   claim 5.

1 8. (Previously Presented) The layer 2 switch of claim 1 further comprising:

2   said blocking circuits not setting said at least one port into a blocked status if said

3 at least one port is to be selected by STP as a root port.

1 9. (Previously Presented) The layer 2 switch of claim 1 further comprising:

2   said first circuits removing said at least one port from a list of ports examined by

3 STP if said port is in the blocked state and then rerunning STP.

1 10. (Previously Presented) The method of claim 5 further comprising:

2   not setting said at least one port into a blocked status if said at least one port is to

3 be selected by STP as a root port.

1 11. (Previously Presented) The method of claim 5 further comprising:

2   removing said at least one port from a list of ports examined by STP if said port is

3 in the blocked state and then rerunning STP.